

Special Issue on Innate Immune Responses against Human RNA Viruses

CALL FOR PAPERS

Human RNA viruses comprise a diverse group of viruses that are of important public health concern worldwide. RNA viruses causing human disease include human immunodeficiency virus, hepatitis C virus, dengue virus, yellow fever virus, Zika virus, influenza virus, rhinovirus, respiratory syncytial virus, SARS coronavirus, Ebola virus, poliovirus, measles virus, and rotavirus, among others. Many of these pathogens represent pandemic and/or lethal threats. Therefore, the search for effective and safe vaccines and treatments against these viruses has become of increasing priority in the field.

Understanding the immune mechanisms mounted in viral infections will contribute to the rational design of protective vaccines and therapeutic strategies. The innate immune responses encompass cells and mechanisms that provide the first line of defense against microorganisms; they are rapid and independent of antigen. Furthermore, these responses play a crucial role in the initiation and activation of adaptive immunity. Many viruses have evolved specific strategies to subvert innate immune responses by attenuating sensing and signaling mechanisms at different steps, allowing the viral survival in the host, which in turn causes disease.

This special issue aims to present and discuss new data on innate immune sensing and signaling of human RNA viruses, mechanisms of evasion of innate immune responses by viruses, and rational design of preventive and therapeutic approaches based on innate immune mechanisms. The issue welcomes the submission of original research articles.

Potential topics include but are not limited to the following:

- ▶ Sensing of human RNA viruses by pattern recognition receptors (PRRs): Toll-like receptors, RIG-I-like receptors, and NOD-like receptors
- ▶ Innate immune cells in viral infections: NK cells, macrophages, dendritic cells, mast cells, $\gamma\delta$ T cells, neutrophils, eosinophils, and other white blood cells
- ▶ PRR downstream signaling cascade activation mechanisms
- ▶ IFN-I induced antiviral effector and immunomodulatory mechanisms
- ▶ The complement system
- ▶ Apoptosis and autophagy
- ▶ Disruption of innate immune induction and signaling responses by RNA viruses
- ▶ Design of vaccines and immunotherapeutic strategies against RNA virus infections

Authors can submit their manuscripts through the Manuscript Tracking System at <https://review.wiley.com/submit?specialIssue=190978>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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